

# Method of growing compound semiconductor

B15

Patent Number:

US5399522

Publication date:

1995-03-21

Inventor(s):

OHORI TATSUYA (JP)

Applicant(s):

FUJITSU LTD (JP)

Requested Patent:

FR2701599

Application Number:

US19930117944 19930908

Priority Number(s):

JP19930050026 19930216

IPC Classification:

H01L21/20

EC Classification:

H01L21/20B6, H01L21/205C2

EC Classification:

H01L21/20B6, H01L21/205C2

Equivalents:

JP3093904B2, JP6244112

## Abstract

A first monocrystalline group III-V compound semiconductor layer is formed on an Si substrate. The surface of the first monocrystalline group III-V compound semiconductor layer is polished. A second monocrystalline group III-V compound semiconductor layer is grown on the polished surface by a metal organic chemical vapor deposition, by using as a group III source material at least partially a source material of group III atoms bonded to ethyl radical at the initial stage of growth, and thereafter by using as the group III source material a source material of group III atoms bonded to methyl radical. A grown layer with a flat surface can be obtained. The surface flatness can be improved further by adding In as a group III element.